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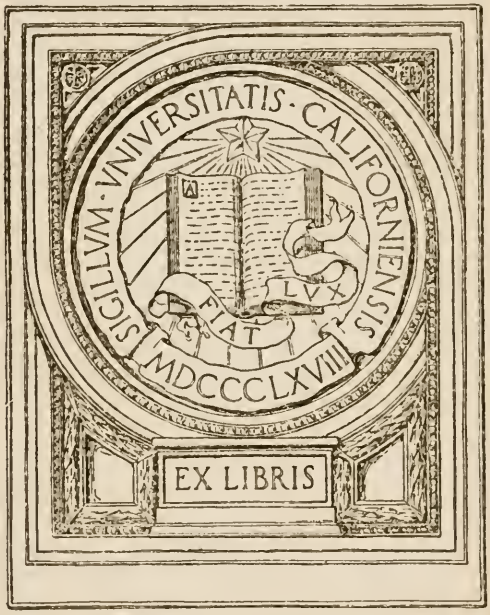

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THE
UNIVERSITY OF MISSOURI
BULLETIN

VOLUME 16 NUMBER 22

EDUCATION SERIES 11 - 16

A STUDY OF THE RURAL SCHOOLS OF SALINE COUNTY, MISSOURI

by
JOSEPH DOLIVER ELLIFF
Professor of High School Administration and High School Visitor, University of Missouri
and
ABNER JONES
Fellow in Education, University of Missouri

UNIVERSITY OF MISSOURI
COLUMBIA, MISSOURI
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FOREWORD

The great development of Missouri schools in recent years has been confined, with few exceptions, to the schools of cities and towns. Altho there has been much favorable legislation, altho the State Department of Education has been competent and sympathetic, altho county superintendents have given their best efforts to the improvement of rural education, the rural schools have made comparatively little progress. To find why the rural schools have not made greater progress is one of the most important problems confronting the people of Missouri. The first step in solving this problem is to secure, with accuracy and detail, the facts of the situation. Accordingly, a movement has been started to study the rural schools of a number of counties of the State for the purpose of finding these facts. Because Saline County is representative of the better agricultural counties, its schools have been selected for the first study.

As noted elsewhere, nothing given in this bulletin should be construed as either a criticism or a defense of the schools concerned. The purpose of the bulletin is to give only a statement of the facts, which will increase in significance as similar statements are secured with regard to the rural schools of other counties in Missouri.

It is only thru the cooperation of a large number of persons that any systematic study of a system of schools is possible. The authors wish to acknowledge their indebtedness to the following:

1. The teachers in the rural schools of Saline County, from whom a large part of the information was obtained.

2. Mr. J. L. Lynch, superintendent of the schools of Saline County, for free access to the records of his office and for valuable suggestions.

3. Professors I. N. Evrard, W. Y. Lockridge, and J. J. Dynes of Missouri Valley College; Professors J. H. Coursault

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and L. L. Bernard of the University of Missouri; Mr. G. W. Reavis of the State Department of Education; and Messrs. J. B. Boyd, W. H. Hargrove, E. O. Wiley, and A. S. Hurt, students in the University of Missouri, for assistance in visiting schools.

4. Dean W. W. Charters of the School of Education of the University of Missouri for assistance in the preparation of the blank forms used and for valuable suggestions concerning all phases of the work.

Joseph D. Elliff
Abner Jones

A STUDY OF THE RURAL SCHOOLS OF SALINE COUNTY, MISSOURI

GENERAL DESCRIPTION OF SALINE COUNTY

Saline County, which is selected for this study, is situated in a large bend on the south side of the Missouri River, about two-thirds of the distance from the eastern to the western border of the state. Rich soil and a navigable waterway made it attractive. Accordingly, it is one of the earlier settled counties of the state, the first settlement having been made in 1810. The growth was slow for a time, but by 1820 several hundred people had come, mostly from Kentucky, Tennessee, Virginia, and Indiana, and lived in settlements for protection against the Indians. At a later date a number of Germans located in the county.

Saline County is a typical Missouri agricultural county of the wealthier sort. On account of rich soil, favorable climate, and accessibility to market, the agricultural conditions of the county are better than the average agricultural conditions of the state. Social conditions are not materially different from those of the state as a whole.

There are two general topographical regions in the county, the river bottoms and the uplands. The bottom land comprises about 125,000 acres along the Missouri River, which forms the boundary for a distance of some seventy-five miles. These bottoms are level and low, subject to frequent inundation, and poorly drained. The uplands vary from a fairly level to a broken and hilly surface, most of it being gently rolling. The broken land is found along the river bluffs and on the smaller streams.

The large area of rich soil is the distinguishing feature of the county. More than 73 per cent of the total area of 478,656 acres is of loessial origin, very rich and fertile. About 65 per cent of the area is a gently rolling, well-drained surface

covered with "Marshall silt loam," a soil that produces from 30 to 100 bushels of corn per acre. Yields of more than 120 bushels per acre have been raised on this soil. The soil in the river bottom varies from sandy soil to heavy gumbo. Some large crops are produced; but, owing to its liability to overflow and the difficulty of handling the heavy soil, this land is not so valuable as the upland. The land ranges in value from $35 to $200 per acre, with an average value, according to the United States Census of 1910, of $76.57.

The Chicago and Alton Railroad and two branches of the Missouri Pacific Railroad give easy and direct access to the Kansas City, St. Louis, and Chicago markets. Kansas City is only sixty miles distant. Besides the railways, there are about 4829 miles of dirt roads, many of which, including both the Sante Fe trail and the north and south state highway, are well cared for.

The rich soil of the county is well adapted to the production of corn, which is the chief product. The enormous corn yields are mostly fed to large numbers of cattle and hogs. In 1912 and 1913, Saline County ranked first in the state in the amount of corn produced; and in 1914, it ranked fourth. In the number of bushels per acre produced, it ranked second in 1912, fifth in 1913, and eleventh in 1914. During the three years mentioned, the county produced from $\frac{1}{42}$ to $\frac{1}{33}$ of all corn produced in the state, with a total yield of from 3,722,732 to 6,143,364 bushels.

Next to corn, wheat is the most important crop. In 1914 the county produced 1,438,356 bushels of wheat, more than $\frac{1}{26}$ of the 36,933,501 bushels produced by the whole state. It ranked first among the counties of the state in the amount of wheat produced.

The census of 1910 shows the productivity of the county to be proportionately greater than that of the state at large. The total value of all farm crops in the county is reported to be $4,527,698, while that of the whole state is $220,663,724. Saline County, therefore, produces approximately $\frac{1}{49}$ of the farm crops of the state. In the total value of animals sold and slaughtered and of poultry and dairy products, Saline

County produced approximately $\frac{1}{54}$ of the total amount produced in the state, the figures being respectively $3,445,230 and $185,713,058. These figures may not mean that the county is more productive than the average of the state for the same area, since the county is a large one. However, a comparison of the rural population of the county with that of the state shows that the county has only about $\frac{1}{88}$ of the rural population of the state. The rural population to the square mile in the county is 28.3, and in the state it is 27.6.

Another way of determining the relative material prosperity of the county is to compare the value of the land and other farm property of the county with that of the state. The census of 1910 shows the average value of farm lands in the county to be $76.57 per acre, while that of the state is $41.80 per acre. The value of all farm property per farm in the county is $14,089, while for the state it is only $7,405. With this great difference in the average wealth per farm, there is little difference in the average size of the farms, which is 138.1 acres for the county and 124.8 for the state.

A slightly greater amount of tenantry in the county and a slightly less freedom from mortgage debt of farm owners operating their own farms than in the state as a whole, may have little significance. In the county 65.9 per cent of the farms are operated by their owners, while in the state 70 per cent of the farms are operated by their owners. In the county almost exactly 50 per cent of the farms operated by their owners are free from mortgage debt, while in the state the percentage is 53.7. The difference is not great.

The population statistics of the last census show Saline County to have, as compared to the state as a whole, a larger percentage of rural population, of native born population, and of negro population respectively, a smaller percentage of illiteracy among whites, and a larger percentage of illiteracy among the negroes. It had proportionately a smaller increase in urban population and a larger decrease in rural population in the ten-year period from 1900 to 1910 than the state as a whole. Of the population of the county, 72.5 per cent is rural; and of the population of the state, 57.5 per cent is rural. The

native-born whites of native parents in the county are 77.2 per cent of the total, while in the state they are 72.5 per cent of the total. The negro population of the county is 12.8 per cent, while of the state it is 4.8 per cent. The illiteracy of the native whites in the county is 2.6 per cent, and in the state it is 2.9 per cent; while among the negroes, the county shows an illiteracy of 20 per cent and the state 17.4 per cent. The census of 1910 shows a decrease in the rural population of many agricultural sections. In Missouri the decrease was 3.5 per cent, but in Saline County it was 18.5 per cent; while the urban population in both county and state increased for the same period, 6.8 per cent in the county and 22.3 per cent in the state. The urban movement is to some extent both cause and effect of the unsatisfactory condition of the rural schools.

Compared with the average run of counties of the state, Saline County is well supplied with educational facilities. Marshall, the county seat, is the seat of Missouri Valley College, a standard four-year college under the control of the Presbyterian Church. A few church schools of elementary grade are maintained in the county. First-class public high schools are maintained at Marshall, Slater, and Sweet Springs; Miami and Blackburn have third-class high schools; while five other towns have unclassified high schools; making ten city, town, and village schools. There are 112 rural district schools in the county, 106 of which were inspected.

THE RURAL SCHOOLS OF SALINE COUNTY

No real national system of schools exists in the United States. The national government, having laid a broad foundation and made liberal provision for a system of free schools in all the states, has left each state free to work out its own plan for these schools in its own way. The national contribution was in money and land. Having vested the title in the state and placed such safeguards as seemed wise, the national government left the state practically free to use or squander its inheritance. Since the states were left free to work out

their own school systems, naturally different types of state administrative systems developed.

State school systems may be roughly divided into two groups, the *centralized* and the *decentralized*. Between these two there are all degrees of difference. In both types the state, by constitutional provision and legislative enactment, makes possible a complete system of free schools. In the centralized type the state goes further and assumes the responsibility and exercises a maximum amount of control, leaving only a minimum amount of control to the local community or district. In the decentralized type the reverse is true, the maximum responsibility and control being left to the local district. The Missouri school system is an excellent illustration of the decentralized or democratic type of school administration. Whether there is a good school or none depends primarily not upon the state, but upon the people in the particular school district. A full understanding of this fact is an aid in understanding recent educational development in Missouri and in answering, in some measure at least, the question: How shall the *unequal* educational opportunities in different communities be accounted for?

In recent years there has been a wonderful growth and development in Missouri schools. In some respects, notably in the case of the public high schools, the development has been almost phenomenal. For the most part, however, the growth has been confined to the towns and cities, only here and there a rural community being found that has made any such advancement as has been made in the towns. The difference cannot be explained on the basis of favorable or unfavorable legislation; for, beginning with the law providing for county supervision, each General Assembly has passed laws specifically designed for the betterment of rural schools. In spite of favorable legislation, in spite of the best efforts of a thoroly competent sympathetic State Department of Education, in spite of the best efforts of county superintendents, the rural schools show comparatively little progress. *Why?*

To find the true answer to this question is one of the most important problems confronting the people of Missouri. No

incomplete or partial solution will answer the purpose; the real underlying causes must be found and removed. In order to do this, all the available facts must be found, if possible. The facts must then be studied in their relation to one another and to the complex whole of which they are parts. It was for the purpose of securing some of the facts that this study was undertaken. This study is in no sense a complete survey of the rural schools of Saline County. Nothing in it is to be construed as a criticism or a defense of the schools. The sole purpose of the study is to get an accurate first-hand statement of the facts.

It will be observed that the facts recorded may be divided into two groups:

1. Measurement and observation; e. g., the ratio of light space to floor space, the condition of the privies.

2. Facts involving a judgment; e. g., the attitude of the people toward the school, the value of the best barn in the district.

All measurements and observations were made on the ground at the time the school was visited, and were made by inspectors each of whom is a trained school man of successful experience. Before beginning work, each inspector was given a blank form on which to record the observations and was instructed in its use. Each was given a tape measure, and the necessary chemicals for testing the drinking water. It was found that some of the information which should have been available in the school records could not be obtained. In every case investigated, the district records were in poor form.

Since it is believed that the facts will interpret themselves, they are submitted with only such comment as will make clear their origin and nature. Not all the data gathered, but only the more important, have been used. The reports on each school have been kept and may be made the basis of a further study.

Where not otherwise specified, the figures in the tables which follow indicate the number of rooms.

Heating and Ventilation

1. Kind of heating plant
   - 77 unjacketed stoves
   - 23 jacketed stoves
   - 10 furnace stoves
2. Location of heating plant
   - 76 near the center of room
   - 33 in the corner of room
   - 1 in basement
3. Kind of fuel used
   - 98 coal
   - 12 wood
4. Place for keeping fuel
   - 6 in house
   - 14 in yard
   - 90 in fuel shed
5. Ventilation
   - 86 by windows and doors only, 3 having boards under windows to prevent drafts
   - 14 by jacketed stoves, the jacketed stoves having no outside air intakes and providing merely for the circulation of the air in the room
   - 10 by furnace

Lighting

1. Ratio of floor space to window space
   - 3 with ratio of 4 to 1
   - 5 with ratio of 5 to 1
   - 20 with ratio of 6 to 1
   - 21 with ratio of 7 to 1
   - 15 with ratio of 8 to 1
   - 17 with ratio of 9 to 1
   - 14 with ratio of 10 to 1
   - 5 with ratio of 11 to 1
   - 5 with ratio of 12 to 1
   - 4 with ratio of 13 to 1
   - 1 with ratio of 16 to 1

Only eight rooms had sufficient light space in proportion to floor space; that is, at least 1 to 5.

2. Location of windows
   - 105 rooms with cross lights; i. e., windows on opposite sides

3. Window shades
   - 6 rooms with no shades
   - 34 rooms with shades in good condition
   - 30 rooms with shades in fair condition
   - 40 rooms with shades in poor condition

In every case the shades were improperly placed, shading the upper part of the window.

Seating

- 84 with double desks
- 26 with single desks
- 19 with broken desks, the number of broken desks being 106
- 461 pupils were improperly seated; i. e., feet dangling or seat too small

Care of Room

1. Floors oiled
   - 7 annually
   - 2 more frequently
   - 101 never
2. Floors scrubbed
   - 61 annually
   - 32 more frequently
   - 17 never
3. Floors swept
   - 103 daily
   - 7 at irregular intervals
   - 0 with use of sweeping mixture
   - 63 by the teacher
   - 23 by the pupils
   - 24 by janitor
   - 41 by teachers without pay for sweeping
   - 22 by teachers paid from one to five dollars per month for sweeping

Water-Closets

- 12 with urinals
- 18 with screens
- 5 with boxes for excreta
- 28 clean
- 70 marked or cut
- 30 marked or cut obscenely

24 scrubbed annually
4 scrubbed monthly
7 scrubbed at irregular times
70 never scrubbed
16 cleaned out underneath annually
5 cleaned out underneath semiannually
84 never cleaned

All closets were earth privies. Three schools had no closets for boys, and one school had no usable privy for boys or girls.

Cloakrooms

15 with separate cloakrooms for boys and girls
23 with common cloakrooms for boys and girls
72 with no cloakroom

Drinking Water

24 with dug wells
50 with cisterns
29 with driven wells
3 with springs
76 with wells and cisterns covered
51 with wells and cisterns liable to contamination from surface drainage
22 with cisterns never cleaned

In 68 of the 106 cases, the examiners' tests of the water supply were unfavorable. This was a simple chemical test to determine the presence or absence of soluble chlorides. An unfavorable test simply meant that the water supply was questionable and that it should be examined by a chemist or practicing physician before being used. Forty-five schools had individual drinking cups for some pupils.

Physical Examination

No school had physical examination of the children.

Play and Playgrounds

1. Apparatus
   12 schools with some playground apparatus
   98 schools with no playground apparatus
   55 schools reported that children play much
2. Games played. (Observed by inspector or reported by teacher and pupils)

58 black man
3 fox and dog
11 tag
22 town ball
7 "antie over"
6 basket ball
33 baseball
16 drop the handkerchief

3. Supervision
   26 with play organized by the teacher
   42 with play supervised by the teacher
4. Size of unobstructed playground
   30 with $\frac{1}{4}$ acre
   20 with $\frac{1}{2}$ acre
   14 with $\frac{3}{4}$ acre
   14 with 1 acre
   2 with $1\frac{1}{4}$ acres
   4 with $1\frac{1}{2}$ acres
   3 with 2 acres
   4 with no playground

Provision for Hot Lunch

No school had provision for hot lunch.

Building and Grounds

1. Material of building
   5 brick buildings
   101 frame buildings
2. Years since building was painted (Reported by teacher, pupils, and patrons)
   6 one year
   4 two years
   1 three years
   1 four years
   42 five years
   8 six years
   28 more than six years
   7 never painted
3. Condition of buildings
   38 in good repair
   31 in fair repair
   37 in poor repair
   16 artistic
   31 buildings with broken windows, a total of 69 panes missing

4. Fences
   - 69 with grounds fenced
   - 22 with fence in good repair
   - 20 with fence in fair repair
   - 27 with fence in poor repair
5. Lawns
   - 67 with well grassed lawns
   - 62 with lawns mowed annually
   - 12 with lawns mowed occasionally
   - 31 with lawns never mowed
6. Landscape gardening
   - 67 with grounds apparently neglected
   - 3 with some attempt at landscape gardening
   - 73 with beautiful natural surroundings
7. Interior decoration
   - 39 with pleasing interior effect
   - 66 with good pictures on the walls
   - 31 with decorations other than pictures
   - 21 with artistic tinting

Equipment

1. Libraries

   Volumes in libraries: total 11,443; lowest number 0; highest number 420; average number 102.

   Value of libraries: total $3852; lowest $0; highest $140; average $35.

   Percentage of useless books: lowest 0; highest 85; median 7.
   - 26 with books in good condition
   - 44 with books in fair condition
   - 40 with books in poor condition
   - 12 with boards obeying the library law
   - 19 with books paid for by the boards
   - 75 with books paid for through entertainments
   - 26 with good selection of books
   - 51 with fairly good selection of books
   - 33 with poor selection of books
2. Blackboards
   - 41 with slate blackboards
   - 18 with composition blackboards
   - 29 with wood blackboards
   - 22 with plaster blackboards
   - 54 with enough blackboard space (3 sq. ft. per pupil)
   - 96 with ordinary chalk
   - 14 with dustless chalk

SCHOOL DISTRICT
MAP OF
SALINE COUNTY
MISSOURI
EXPLANATION
MISSOURI
MIAMI
MIAMI DIST
MALTA BEND DIST
MARSHALL
FAIRVILLE
SLATER
GRAND PASS
No 1
No 2
No 3
No 4
No 5
No 6
No 7
No 8
No 9
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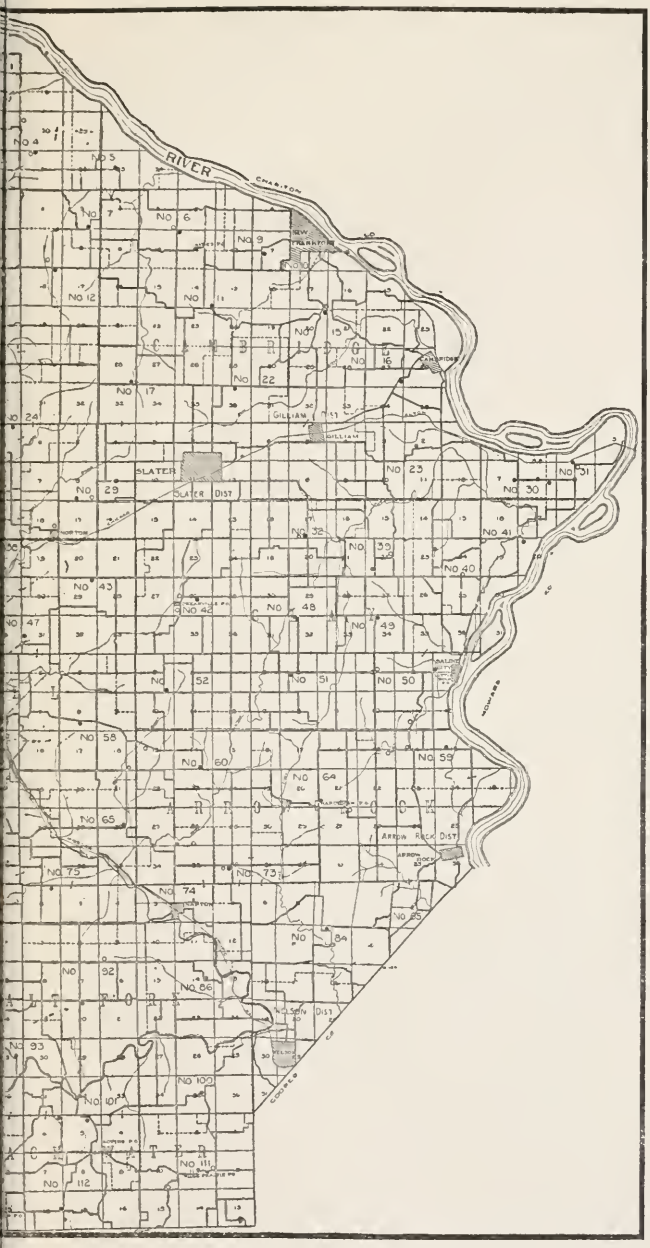
RIVER
CHARITON
NEW FRANKFORT
CAMBRIDGE
GILLIAM
SLATER
SLATER DIST
MISSOURI
ARROW ROCK DIST
ARROW ROCK
MIAMI
NO 3
NO 4
NO 6
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NO 11
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NO 93
NO 100
NO 101
NO 110
NO 112

3. Teacher's desk
   - 54 with teachers' desks in good condition
   - 25 with teachers' desks in fair condition
   - 30 with teachers' desks in poor condition
   - 1 with no teacher's desk.

4. Supply of books on teachers' desks
   - 13 with good supply
   - 23 with fair supply
   - 58 with poor supply
   - 16 with no supply

All desk books were paid for by the teachers.

5. Miscellaneous
   - 57 with good dust-proof book cases
   - 13 with cabinets
   - 15 with organs
   - 0 with a piano or phonograph
   - 1 with a museum
   - 1 with free textbooks
   - 86 with one or more maps
   - 41 with enough maps (Missouri, United States, continents)
   - 72 with enough good erasers
   - 1 with some equipment for teaching manual training
   - 11 with some equipment for teaching agriculture
   - 30 with measuring sticks for teaching arithmetic
   - 1 with balance and weights for teaching arithmetic
   - 2 with liquid or dry measure for teaching arithmetic
   - 2 with some equipment for sewing
   - 1 with some equipment for cooking
   - 50 schools used slates
   - 281 pupils used slates

6. Textbooks
   - 80 with all pupils fully supplied

Finance

The financial statistics were obtained from the records in the office of the county superintendent of schools and are for the school year 1913-14. In most cases the district clerks failed to make a full detailed statement of receipts and expenditures by funds as the law requires.

1. Taxation

   Assessed valuation: total (76 districts) $7,137,065; lowest $12,930; highest $215,000; median* $70,000; middle 50 per cent $49,500 to $109,285.

   Levy for school purposes (cents on $100): highest 75; lowest 0; median 40; middle 50 per cent 40 to 65; 37 levied 40c and 27 levied 65c.

* The median is the case which was found in the investigation to have as many cases below it as there are above it.

Levy for interest and sinking fund reported by only two districts, one 15c and the other 25c on $100.

Levy for building: seven cases reported lowest 10c and highest 25c on $100.

Total tax levy (cents on $100): highest 90; lowest 0; median 40; middle 50 per cent 40 to 65; 38 districts levied 40c; 21 districts levied 65c.

Receipts last year (93 districts)

Cash on hand: total $15,092; lowest $2; highest $1260; median $115; middle 50 per cent $44 to $221.

2. Receipts from permanent funds

State: total $8,589; highest $378; lowest $30; median $73; middle 50 per cent $68 to $90.

County: total $3,273; highest $102; lowest $7; median $33; middle 50 per cent $24 to $41.

Township: total $1328; highest $165; lowest $1; median $8; middle 50 per cent $5 to $17.

Railroad: total $5908; highest $146; lowest $28; median $68; middle 50 per cent $50 to $95.

Total from public funds (78 cases) highest $538; lowest $66; median $194; middle 50 per cent $140 to $227.

3. Receipts from local funds (87 cases)

For school purposes: total $28,823; highest $885; lowest $101; median $310; middle 50 per cent $218 to $430.

For interest, building, and miscellaneous there are no data.

4. Expenditures last year (97 cases)

Teachers: total $42,023; highest $880 (two teachers); lowest $180; median $397; middle 50 per cent $305 to $490.

Clerk: total $1024; highest $25; lowest $0; median $10; middle 50 per cent $10 to $12.

Fuel: total $5769; highest $68; lowest $4; median $25; middle 50 per cent $18 to $34.

Total expenditures: highest $1097; lowest $189; median $481; middle 50 per cent $380 to $641.

5. Salary of teacher per month (104 cases)

Total $5292; highest $80; lowest $32.50; median $50; middle 50 per cent $45 to $60.

6. Values of school buildings compared with values of barns

Value of best barn in district (80 cases): highest $3500; lowest $200; median $1200; middle 50 per cent $1000 to $1500.

Value of average barn (80 cases): highest $1000; lowest $100; median $500; middle 50 per cent $300 to $500.

Value of school building (91 cases): total $53,150; highest $2000; lowest $150; median $400; middle 50 per cent $300 to $700.

Attendance

1. Enumeration (94 cases): total 3,732; highest 107; lowest 8; median 37; middle 50 per cent 28 to 47.
2. Enrollment (104 cases): total 2710; highest 66 (a two-room school); lowest 5; median 26; middle 50 per cent 16 to 33.

The largest number enrolled in any one-teacher school was 55.

The survey was made during the first month, so average attendance was not found.

Attitude Toward School

1. Wealthy class without children (96 cases)
   - 46 with this class friendly
   - 21 with this class unfriendly
   - 8 with this class indifferent
   - 21 with no data
2. Tenants (83 cases)
   - 70 with tenants interested
   - 13 with no data
   - 0 with tenants uninterested

Per cent of tenants: highest 100 per cent; lowest 2 per cent; median 25 per cent.

3. Community as a whole (98 cases)

   No community with very strong interest in school
   - 20 communities with strong interest in school
   - 40 communities with fairly strong interest in school
   - 36 communities indifferent to school
   - 2 communities opposed to school

Use of School Buildings During Previous Year

1. Farmers' meetings
   - 95 not used
   - 8 used

Two buildings were used for this purpose three times each; one was used two times, and the others were used once each.

2. Social meetings (chiefly school entertainments for the purpose of raising money)

56 not used
45 used

Four times was the most any building was used for this purpose.

3. Debating societies
   99 not used
   1 used

4. Political meetings
   4 used, two times having been the maximum in any case
   96 not used

5. School meetings
   98 used
   1 not used

One building was used five times, and most of the buildings were used only once.

6. Religious meetings
   5 used, one having been used weekly, one monthly

7. All other purposes
   5 used

8. Attitude of communities toward a wider use of the school plant
   12 opposed
   20 favorable
   34 indifferent
   44 no data

Instruction

1. Teachers living conditions
   Salary per month (see page 19)
   Board per week: highest $5; lowest $1.50; median $3. 38 teachers live at home, 26 of these pay no board.
   Distance teacher lives from school: farthest 9 miles; closest less than $\frac{1}{4}$ mile; median $\frac{3}{4}$ mile; middle 50 per cent $\frac{1}{4}$ to 2 miles

2. Age of teacher (106 cases)
   41 from 18 to 21 inclusive
   32 from 22 to 25
   9 from 26 to 29
   24 more than 29
   Lowest 18; highest 66.

3. Sex of teachers
   24 male
   86 female

4. Grade of certificate
   - 1 special
   - 33 third grade
   - 50 second grade
   - 18 first grade
   - 1 normal diploma
   - 4 teacher training
   - 3 no data

5. Number of months experience of teachers at beginning of term (108 cases)
   - 39 with 8 or less
   - 14 with 9 to 16 inclusive
   - 9 with 17 to 24 inclusive
   - 9 with 25 to 32 inclusive
   - 25 with no previous experience

   Highest 280; lowest 0; middle 50 per cent 8 to 48.

6. Number of years in high school (105 cases): lowest 0; highest 5 (2 cases); median 4 (78 cases)

7. Number of years in college or university: lowest 0 (69 cases); highest 4 (2 cases); less than one year 19 cases; one year 8 cases; more than one and less than four years 7 cases.

8. Number of terms in normal school
   - 59 had not attended
   - 29 had attended one term
   - 14 had attended two or three terms
   - 3 had attended more than three terms

9. Number of months in present school (108 cases)
   - 77 less than 9 months
   - 17 from 9 to 16 months
   - 5 from 17 to 24 months
   - 9 more than 24 months

10. Lines of study carried on by teachers
    - 25 reading circle work
    - 5 "general" work
    - 1 correspondence work
    - 1 musical work

11. Records
    - 110 with record of absences in all cases
    - 40 with record of causes of absences
    - 87 with record of class standing in permanent form
    - 41 with last term's report in the building

12. Permanence of teaching force

    Number of teachers since 1908 (104 cases)
    - 2 with one teacher

10 with two teachers
24 with three teachers
28 with four teachers
26 with five teachers
11 with six teachers
3 with seven teachers

13. General discipline (inspector's judgment)
21 teachers nagged
79 schools had children happy in their work (inspectors reporting pupils happy if they did not seem to be unhappy)
68 schools had lively school spirit (see comment above)
42 schools had lifeless school spirit
60 teachers were likable
6 teachers were unlikable
44 teachers were neither likable nor unlikable
53 teachers had a good sense of humor

No data for corporal punishment.

14. General character of daily program
78 with well defined daily programs
32 with no well defined daily program
59 with alternations

15. Number of class periods per day per teacher
12 with less than 24 class periods daily
18 with 24 class periods daily
10 with more than 24 and less than 30 periods daily
15 with 30 class periods daily
13 with more than 30 class periods daily
Lowest number 16; highest 34.

16. Character of teaching (inspector's judgment)
75 with teachers following the book in class work
35 with teachers following the pupil in class work
90 with teachers having a good standard of personal speech
51 with good English required of pupils
69 with motivation through generic appeals
15 with motivation through intrinsic function of subject-matter
54 with text-books used intelligently
56 with text-books used unintelligently
88 with test questions chiefly
13 with developing questions
57 with pupils having opportunity to think
19 with subject-matter usually told to the pupils
80 with pupils usually getting subject-matter from the book
23 with summaries made wisely
35 with adequate drill
18 with applications of knowledge made

34 with teachers giving concrete instruction
69 with teachers giving abstract instruction

17. Results of teachers' work (inspector's judgment)
21 with pupils understanding intrinsic function of subject-matter
23 with pupils able to organize subject-matter
45 with pupils skillful in memory and drill operations
23 with pupils making applications intelligently
60 with pupils liking their work
2 with organizations effective in school life

The Rural School Board

In most cases the official records of the district could not be secured. In no case were the district records well kept. From conversations with teachers, district clerks, and members of the boards, it was learned that the usual method of doing business was as follows: The newly elected board held a short meeting for the purpose of organization at the time of the annual election. Quite commonly this was the only full meeting of the board during the year. The teacher was employed, supplies purchased, contracts entered into, and warrants drawn, all without a meeting of the board and contrary to law.

In the employment of a teacher, the members of the board separately interviewed the applicants, the prospective teacher making the rounds of the board. The first member interviewed by the applicant would tell her whether he favored her election; the next member would then be visited and would be told what the first one said. If the second member was favorable, the matter was considered settled, and the clerk would draw up a contract and sign it. The fortunate applicant would take the contract to the president of the board, who would attach his signature to it. Warrants were issued in much the same way, the teacher's monthly report being filed with the district clerk, who would fill out and sign a warrant for the month's salary. The teacher would then take the warrant to the president of the board for his signature.

Illustrations of Unequal Educational Advantages

(Data for one-room schools)

Assessed valuation of districts: highest $215,000; lowest $12,930.
Enumeration of districts: highest 107; lowest 8.
Total tax levy of districts: highest $0.90; lowest 0.
Value of school buildings: highest $1500; lowest $150.
Annual salary of teacher: highest $640; lowest $180.

Comparative Value of Barn and Schoolhouse

Median value of schoolhouse	$ 400
Median value of average barn	500
Median value of best barn	1200

SUMMARY—THE MEDIAN SCHOOL

Perhaps the *median** is the most significant single measure of any group of related facts. There is, of course, no such thing as a median school. If, however, a hypothetical school is constructed on the basis of the medians for the entire group, the result will be a fairly accurate statement that will serve as an excellent typical case and will fairly represent the county as a whole.

The median district has an enumeration of 37 and an average daily attendance of 20. The assessed valuation is $70,000 and the school tax forty cents on the hundred dollars. The receipts and expenditures for the year are as follows: received from direct taxation $280; from state $73; from county $33; from township $8; from railroad $68; total $462. The teacher's salary is $400. The amount spent for all other purposes is $50.

The building, which is worth $400 (about $100 less than the average barn in the district), is well located but in rather poor repair. It is the usual box-car type of construction, warmed by a coal stove placed near the center of the room. There is no means of ventilation, except the windows and doors. The lighting is very deficient, there being cross-lights and a ratio of light space to window space of one to eight. There are ordinary green shades, but they are improperly placed so as to shade the upper part of the windows. The floors are of hard pine, never oiled, scrubbed once last year, and swept daily by the teacher, who is not paid for the work.

The water-closets are earth privies without urinals, screens, or boxes for excreta. They are near the house and in plain view of each other. They are never scrubbed, never cleaned out underneath, and are badly marked and cut.

The drinking water is obtained from a cistern in the school yard and is liable to contamination from surface drain-

* The median is the case which was found in the investigation to have as many cases below it as there are above it.

age. The cistern has not been cleaned for a long time, the pupils have drinking cups in common, and the water is probably unfit for drinking purposes.

The school grounds are rectangular in form, about three fourths of an acre in area, and fenced with a wire and board fence. The plot is well grassed and was mowed last summer. The children are not taught to play and the play is not supervised. There is no playground apparatus and the children play "drop the handkerchief," "town ball," and baseball.

The equipment consists of a library of 102 books, worth about $35. Of the library books 7 per cent are useless. The books are in a fair state of repair and are kept in a good bookcase. They were selected by the teacher and paid for with the receipts from box suppers.

There is enough good blackboard, but it is too high to be of the best service to the smaller children. The teacher's desk is in fair condition and is fairly well supplied with books, which she herself has paid for. There is no equipment for teaching arithmetic, manual training, agriculture, cooking, or sewing.

The pupils are well supplied with textbooks.

Of the people in the district, 25 per cent are tenants. There is a fairly strong interest in the school on the part of the patrons. The building was used twice last year for public meetings, once for a school meeting and once for a box supper.

The teacher is twenty-two years of age and this is her second year in teaching but her first year in this school. She is a graduate of a first-class four-year high school and holds a second grade county certificate. She has never attended college or normal school, has had no professional training, and in fact, is doing no professional work this year.

COMPARISON WITH OTHER SCHOOLS

The report of the state superintendent for 1913-14 gives some facts that are used as a basis for a comparison of the rural schools of Saline County with those of the state and with those of the towns of the county, especially Marshall. Marshall is

the largest city in the county and has the most efficient schools. Statistics are not given separately in the report for the rural schools of the county, but they are given for the city and village schools. The figures for the rural schools were obtained by subtracting the combined figures for the ten towns from the figures for the county. The instruction in the rural school is practically all of elementary grade. The figures for elementary instruction in the towns were determined by subtracting the figures for the high schools from the total in all cases where the figures were not given separately for the elementary grades.

The following table shows the rural districts of Saline County to have a larger enumeration and also a larger total enrollment than the ten towns of the county, but that the total number of days attended in the towns is greater than the total number of days attended in the country, and that in the ten towns of the county more than three times as many pupils finished the eighth grade as in the rural districts.

	Ten Towns	*Rural Districts*
Enumeration	3506	3446
Enrollment	3089	3232
Total days attended by all pupils	441,067	352,890
Graduates of the 8th grade	173	52

The following table shows that the ten towns in the county have a total assessed valuation less than half of the total assessed valuation of the rural districts, and that they spend more than twenty per cent more on their schools than the rural districts spend for this purpose.

	Ten Towns	*Rural Districts*
Valuation	$5,248,350	$10,849,484
Total expenditure	79,738	55,642

The following table shows that most of the better-trained teachers as indicated by the certificate held, are in the towns

of the county. There are three classes of certificates reported, normal school, state, and county, the county being the lowest. This table also shows the greater permanency of service in the towns.

	Ten Towns	*Rural Districts*
No. of teachers	100	122
State teacher's certificates	26	3
Normal school certificates	35	2
Teacher only one year in present position	32	74

The following table shows that the rural schools of Saline County have a larger average assessed valuation per teacher employed and per pupil enumerated than that of the rural districts of the state as a whole, and also larger than that of the city of Marshall. It also shows that the rural schools of Saline County spend more per pupil than the average for the rural schools of the state but less than the city of Marshall.

	Rural—Saline County	*Rural—State*	*Marshall*
Assessed valuation per teacher employed	$88,930	$66,401	$71,046
Assessed valuation per pupil enumerated	3148	1569	2099
Amount expended per pupil enumerated	16.15	10.24	27.87
Amount expended per pupil in average attendance	20.09	18.11	36.16
Amount expended daily per pupil attending	.151	.130	.201

The following table shows that the rural schools of Saline County spend more for elementary education per pupil enumerated than the average amount thus expended by the rural

schools of the state or by the city of Marshall. It also shows that, in number of days of school for each pupil and in the proportion finishing the eighth grade, this expenditure produces results greater than the average results produced in the rual districts of the state, but less than the average results produced in the city of Marshall.

	Rural— Saline County	*Rural— State*	*Marshall*
Expenditure for elementary education per pupil enumerated	16.15	10.24	14.39
Average No. days attended per pupil	109.2	95.1	146.9
Percent of enumeration completing the 8th grade	1.51	1.23	5.59

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